

## CLAIMS

What is claimed is:

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1. A composition for the targeted delivery of a therapeutic agent to a tissue expressing asialoglycoprotein receptors comprising an effective amount of the agent encapsulated in a liposome coupled to desialyated glycoprotein- $\alpha 1$ .
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2. The composition of claim 1, wherein the therapeutic agent is a drug or a polynucleotide.
3. The composition of claim 2, wherein the polynucleotide is cDNA encoding a therapeutic protein, a ribozyme, and antisense DNA.
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4. The composition of claim 1, wherein the therapeutic agent is selected from the group consisting of a cytotoxic drugs, a protein.
5. The composition of claim 4, wherein the cytotoxic drug is selected from the group consisting of doxorubicin, vincristine, daunorubicin, and amphiphatic amines.
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6. The composition of claim 1, wherein the desialyated glycoprotein - $\alpha 1$  is coupled to the liposome by an avidin-biotin or thiol-maleamide linkaes.
7. A method for targeted delivery of a therapeutic agent to a tissue expressing asialoglycoprotein receptors comprising delivery to the tissue an effective amount of the composition of any of claims 1 to 6.
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8. A method for inhibiting the proliferation of liver cancer by administering to a subject in need of such therapy an effective amount of a composition containing doxorubicin encapsulated in desialyated glycoprotein- $\alpha 1$  coupled to a liposome.

add A<sup>4</sup>  
add B<sup>1</sup>